

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 3. (Canceled).
4. (Currently Amended) A method for constructing a ~~frame~~-base knowledge representation, the method comprising the steps of:
 - selecting articles to serve as an information source for the knowledge representation;
 - extracting and formatting information contained in the articles for storage in the knowledge representation including representing a fact expressed in an article's natural language as at least an object and process relationship;
 - ~~extracting information from the selected articles and formatting it for storage in the knowledge representation;~~
 - verifying that the information extracted from the selected articles is correct and that it has been placed in the correct format; and
 - storing the formatted information in the knowledge representation.
5. (Original) The method of claim 4 wherein the extracting information step is performed by knowledge extraction personnel and the verifying step is performed by quality control personnel.
6. (Original) The method of claim 5 wherein both the extracting step and verifying step are performed by the same person, which person has been qualified by a predetermined procedure to perform both steps simultaneously.
7. (Original) The method of claim 4 wherein at least the steps of extracting and verifying occur in geographically separated locations.
8. (Original) The method of claim 7 wherein the geographically separate locations are chosen based upon the cost of performing the respective steps of extracting and verifying, the lowest cost location for each step being selected.

9. (New) The method of claim 4, wherein the extracting information step includes using a computer-driven parser of natural language.
10. (New) The method of claim 4, wherein the representing step includes representing an object and process relationship in the form of the process being an action that acts upon the object.
11. (New) The method of claim 4, wherein the representing step includes representing an object and process relationship in the form of the first object being an effector of the process and the process is an action that acts upon one or more second objects.
12. (New) A system for extracting information from articles originating from a first database and storing the extracted information in a second database, the system comprising:
an information extraction unit which extracts a finding from an article's natural language and translates this finding into a structured finding comprising at least an object, process, and a relationship between the object and process;
a database management unit in communication with the information extraction unit for determining if the structured finding has been properly formatted for storage in the second database;
an information storage unit in communication with the second database for storing the structured finding in the second database.
13. (New) The system of claim 12, further comprising a query management and information display unit for responding to user inquiries for information stored in the second database and for retrieving information from the second database in response to those queries.
14. (New) The system of claim 12, wherein the second database is frame-based.
15. (New) The system of claim 12, wherein the structured finding is formatted according to a fact-based model.
16. (New) The system of claim 12, wherein the relationship between the object and process takes the form of the process is an action that acts upon the object.
17. (New) The system of claim 12, wherein the object is a gene, protein, cell, or organism.
18. (New) The system of claim 12, wherein the finding is derived from one or more sentences, a portion of a sentence, a diagram, figure or table.
19. (New) The system of claim 12, wherein the second database includes an ontology.

20. (New) The system of claim 12, wherein the first database is coupled to, and in communication with the information extraction unit.
21. (New) The system of claim 12, further including an article selection unit, for selecting articles for information extraction from among a plurality of articles residing in the first database.
22. (New) The system of claim 12, wherein the article's representation of the finding has a first semantic structure and wherein the translation of the finding includes a translation of the finding into a natural language having a second semantic structure.
23. (New) The system of claim 12, wherein information is extracted using a user template.
24. (New) The system of claim 12, wherein information is extracted using a computer-driven parser of the natural language.
25. (New) The system of claim 12, wherein the structured finding comprises a first object, second object and a process relationship.
26. (New) The system of claim 25, wherein the second object is an additional process or pathway.
27. (New) The system of claim 25, wherein the first object is an effector of the process and the process is an action that acts upon the second object and that is mediated by a third object.
28. (New) The system of claim 25 wherein the first object, second object and process include modifiers.
29. (New) The system of claim 25, wherein the first object is a first comparison of the property between two objects or processes, the second object is a second comparison of the property between two objects or processes, and the process is a relative comparison between the first and second comparisons.
30. (New) The system of claim 12, wherein the process is a process modifier and the structured finding further includes a second object that is a process or a pathway.
31. (New) The system of claim 12, wherein the object and process relationship takes the form of a first object as an effector of the process and the process indicates an action that acts upon one or more second objects.
32. (New) The system of claim 31, wherein the process indicates a lack of action upon the one or more second objects.

33. (New) The system of claim 12, wherein the object contains one or more modifiers.
34. (New) The system of claim 12, wherein the object and process include property annotations indicating one of a cellular, organ, or other physical location.
35. (New) The system of claim 12, wherein the object is an effector of a plurality of processes and all of these processes are actions that act upon a second object.
36. (New) The system of claim 12, wherein the article's natural language includes a first and second finding and wherein the first finding comprises the process and object and the object includes the second finding.